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(54) Title: METHODS FOR MEASURING ENZYME ACTIVITIES IN CELLS, BLOOD, TUMORS AND TISSUES

(57) Abstract: ABSTRACT [0072] The invention provides improved methods for measuring enzymatic activities involved in the oxidative and non-oxidative pentose phosphate pathways, and other thiamine pyrophosphate containing enzymes, which are commonly elevated in tumor cells. The assays of the invention are useful for optimizing therapeutic dosing and scheduling of drugs acting on the pentose phosphate pathways by sampling and monitoring enzymatic levels in a treated patient over time. Finally, the assays are useful for identifying and characterizing compounds having beneficial therapeutic effects.